Title (en)

CONDITIONING METHODS FOR GENE THERAPY

Title (de)

KONDITIONIERUNGSMETHODEN ZUR GENTHERAPIE

Title (fr)

MÉTHODES DE CONDITIONNEMENT POUR THÉRAPIE GÉNIQUE

Publication

EP 3958878 A4 20221228 (EN)

Application

EP 20795937 A 20200424

Priority

- US 201962838278 P 20190424
- US 201962944925 P 20191206
- US 2020029934 W 20200424

Abstract (en)

[origin: WO2020219964A1] The disclosure provides compositions and methods useful for the depletion of a specific population of endogenous hematopoietic stem cells and/or immune cells from a subject prior to transplantation with genetically modified stem cells to improve the engraftment of the transplanted stem cells and provide gene therapy. The disclosure provides compositions and methods for the treatment of various hematopoietic diseases, metabolic disorders, cancers, and autoimmune diseases, among others. Described herein are antibodies, antigen-binding fragments, and conjugates thereof that can be applied to effect the treatment of these conditions, for instance, by depleting a population of CD117+ or CD45+ cells in a patient, such as a human.

IPC 8 full level

A61K 35/28 (2015.01); **A61P 7/00** (2006.01); **A61P 37/02** (2006.01); **C07K 14/805** (2006.01); **C12N 15/86** (2006.01)

CPC (source: EP US)

A61K 35/28 (2013.01 - EP US); **A61K 47/6825** (2017.07 - EP US); **A61K 47/6849** (2017.07 - EP US); **A61P 7/00** (2017.12 - EP); **A61P 37/02** (2017.12 - EP); **C07K 14/47** (2013.01 - EP); **C07K 14/805** (2013.01 - EP); **C07K 16/2803** (2013.01 - EP US); **C07K 16/289** (2013.01 - EP); **C12N 9/0036** (2013.01 - EP); **C12N 9/12** (2013.01 - EP); **C12N 9/16** (2013.01 - EP); **C12N 9/22** (2013.01 - EP); **C12N 9/2402** (2013.01 - EP); **C12N 9/2471** (2013.01 - EP); **C12N 9/78** (2013.01 - EP); **C12N 15/86** (2013.01 - EP); **C12Y 106/03001** (2013.01 - EP); **C12Y 207/11001** (2013.01 - EP); **C12Y 301/06001** (2013.01 - EP); **C12Y 302/01023** (2013.01 - EP); **C12Y 302/01046** (2013.01 - EP); **C12Y 302/01052** (2013.01 - EP); **C12Y 302/01076** (2013.01 - EP); **C12Y 305/04004** (2013.01 - EP); A61K 48/00 (2013.01 - US); A61K 2039/505 (2013.01 - EP); C07K 2317/21 (2013.01 - EP US); C07K 2317/524 (2013.01 - EP); C07K 2317/53 (2013.01 - EP); C07K 2317/71 (2013.01 - EP); C07K 2317/92 (2013.01 - US); C12N 2740/16043 (2013.01 - EP); Y02A 50/30 (2017.12 - EP)

Citation (search report)

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- [I] WO 2018183613 A1 20181004 - CHILDRENS MEDICAL CT CORP [US], et al
- [IP] WO 2019084064 A2 20190502 - MAGENTA THERAPEUTICS INC [US]
- [IP] PEARSE BRADLEY R.: "A Non-Genotoxic Anti-CD117 Antibody Drug Conjugate (ADC) Designed for Patient Conditioning Prior to Stem Cell Transplant and HSC-Based Gene Therapy Has a Broad Therapeutic Window across Species", 20 February 2020 (2020-02-20), XP055979469, Retrieved from the Internet <URL:https://www.magentatx.com/wp-content/uploads/2020/02/TCT-MGTA-117-Presentation.pdf> [retrieved on 20221109]
- [I] AGNIESZKA CZECHOWICZ ET AL: "Selective hematopoietic stem cell ablation using CD117-antibody-drug-conjugates enables safe and effective transplantation with immunity preservation", NATURE COMMUNICATIONS, vol. 10, no. 617, 6 February 2019 (2019-02-06), XP055617538, DOI: 10.1038/s41467-018-08201-x
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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2020219964 A1 20201029; AU 2020261079 A1 20211223; CA 3134689 A1 20201029; CN 113993550 A 20220128; EP 3958878 A1 20220302; EP 3958878 A4 20221228; JP 2022531141 A 20220706; US 2022175946 A1 20220609

DOCDB simple family (application)

US 2020029934 W 20200424; AU 2020261079 A 20200424; CA 3134689 A 20200424; CN 202080045488 A 20200424; EP 20795937 A 20200424; JP 2021563181 A 20200424; US 202117507456 A 20211021